

Date: Mon, 20 Jun 94 04:30:32 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #168
To: Ham-Homebrew

Ham-Homebrew Digest Mon, 20 Jun 94 Volume 94 : Issue 168

Today's Topics:

 49MHz walkie talkies legal to use for other bands? (3 msgs)
 cheap cases wanted (2 msgs)
 Help with RC4739 op amp
 L.O FOR 1.2, 1.3, 1.4, 1.5 GHZ
 Scanner docs needed
 Source for PC board material

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 19 Jun 1994 13:12:29 -0400
From: news1.digex.net!access.digex.net!not-for-mail@uunet.uu.net
Subject: 49MHz walkie talkies legal to use for other bands?
To: ham-homebrew@ucsd.edu

In article <2u04d9\$peo@news.ysu.edu>, Ben Slagle wrote:

>
> Please forgive me if this is a dumb question, but I just got my ticket and I
> don't want to lose it. Can a 49MHz walkie talkie(runs from a 9v battery)
> be converted to run on other bands, such as 440, legally? I thouhtabout
> changing the crystal and antenna to the frequency I want. Please do not
> flame me. Thank you for your time.
>
> 73 de KB8SUJ (Technician Plus)

Congrats on the ticket! Yes, you can legally convert radio gear to operate
in the ham bands legally, as long as the transmissions meet the spurious
spec's set forth. The best you can expect from the 49Mhz HT is moving it up

to the 6 meter area. You may want to build an outboard solid state amp too, unless you can get it to work on a nearby repeater. 440Mhz is way out of it's intended design, so I wouldn't ,ake that my priority. Good luck!

Andy N3LCW

Date: Sun, 19 Jun 1994 15:44:13 GMT
From: ihnp4.ucsd.edu!swrinde!emory!rsiatl!ke4zv!gary@network.ucsd.edu
Subject: 49MHz walkie talkies legal to use for other bands?
To: ham-homebrew@ucsd.edu

In article <2u04d9\$peo@news.ysu.edu> aq760@yfn.ysu.edu (Ben Slagle) writes:

>
>Please forgive me if this is a dumb question, but I just got my ticket and I
>don't want to lose it. Can a 49MHz walkie talkie(runs from a 9v battery)
>be converted to run on other bands, such as 440, legally? I thouhtabout
>changing the crystal and antenna to the frequency I want. Please do not
>flame me. Thank you for your time.

It's legal to convert *any* radio, or build one from scratch for that matter, into the amateur bands as long as the result meets the standards of good amateur practice in regards spurious emissions. However, the only *practical* ham band to convert a 49 MHz HT to is 6 meters. You'd practically have to rebuild it from scratch to make it work right at 70 cm. They make dandy little 6 meter rigs though, and the conversion is usually easy.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: Sun, 19 Jun 1994 21:54:31 GMT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!math.ohio-state.edu!caen!malgudi.oar.net!witch!ted!mjsilva@network.ucsd.edu
Subject: 49MHz walkie talkies legal to use for other bands?
To: ham-homebrew@ucsd.edu

In article <2u04d9\$peo@news.ysu.edu>, Ben Slagle (aq760@yfn.ysu.edu) writes:

>
>Please forgive me if this is a dumb question, but I just got my ticket and I

>don't want to lose it. Can a 49MHz walkie talkie(runs from a 9v battery)
>be converted to run on other bands, such as 440, legally? I thouhtabout
>changing the crystal and antenna to the frequency I want. Please do not
>flame me. Thank you for your time.

>

As a ham, you can use any equipment you want, as long as it meets all the Part 97 specs for the band and mode you're using. If you want to convert an old TV into a 2m tranceiver, it's legal (not feasible, but legal!). The only legal problem comes with trying to go the other way, using ham gear on non-ham frequencies.

As for converting 49MHz walkies, some people are converting them to 6m (50-54MHz), but you're not going to get it up to 440. That's far too large a jump.

73,
Mike, KK6GM

Date: 19 Jun 1994 17:09:11 GMT
From: ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!lll-winken.llnl.gov!noc.near.net!
chaos.dac.neu.edu!chaos.dac!dean@network.ucsd.edu
Subject: cheap cases wanted
To: ham-homebrew@ucsd.edu

Hi:

I'm sick of using those cheap RADIO SHAFT cases for my projects. Does anyone know of a good source of inexpensive, readily available project cases? Has anyone tried making their own?

-Dean

Date: Sun, 19 Jun 1994 20:30:04 GMT
From: netcomsv!netcomsv!bongo!julian@decwrl.dec.com
Subject: cheap cases wanted
To: ham-homebrew@ucsd.edu

In article <DEAN.94Jun19130911@splinter.coe.neu.edu>
dean@splinter.coe.northeastern.edu writes:

>Hi:

> I'm sick of using those cheap RADIO SHAFT cases for my projects. Does
>anyone know of a good source of inexpensive, readily available project cases?
>Has anyone tried making their own?

There is a simple and cheap solution to this. Go to a trendy designer store such as "Cost Plus" or "Pier One", the sort of place that sells wicker chairs and cheap china. They often sell empty biscuit tins with cute pictures of cats on them. They come in many sizes and shapes, they are tinned for easy soldering.

The other source source of biscuit (sorry cookie U.S.) tins is oriental grocery stores. They sell biscuits in wonderful square tins. Try the durian cookies for a truly different experience. The cookies are cheap and tasty, the tins are free. I have also picked up aluminium "sandwich boxes" at oriental grocery stores. These are an RF tight aluminium box - would cost about \$30.00 if they were sold for RF rather than lunch.

If you don't think having your stuff in a tin with pictures on it is "professional" (The correct term is "businesslike") then paint it in a trendy designer pastel or tiresome engineering blue/grey.

--

Julian Macassey, N6ARE julian@bongo.tele.com
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

Date: 19 Jun 94 23:29:59 CDT
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!
moe.ksu.ksu.edu!kuhub.cc.ukans.edu!koku@network.ucsd.edu
Subject: Help with RC4739 op amp
To: ham-homebrew@ucsd.edu

Hello,

I am building a project out of book that is a few years old and am having trouble locating an IC called for in the book. The IC used is the RC4739 or XR4739 dual low-noise op amp. Is this chip no longer made? Is there a good substitute?

I am having a similar problem finding a CLM6000 opto-isolator (manufactured by Clairex).

I would greatly appreciate any help that you may be able to give. I am new to electronic projects and have neither the skill or the reference books to find a good substitute IC.

Mike, KG0JT

Date: Mon, 20 Jun 1994 04:48:03 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!spool.mu.edu!sgiblab!a2i!mlyon.a2i!
mlyon@network.ucsd.edu
Subject: L.O FOR 1.2, 1.3, 1.4, 1.5 GHZ
To: ham-homebrew@ucsd.edu

well i am trying to design a L.O for 1.2, 1.3, 1.4, 1.5 ghz. i don't think i can do it with crystals (but if anyone thinks i can i would love to hear from you on how i could do it :). so my idea was to build the oscillator with the good old caps and inductors (feedback type). the thing is though is the fact that i can't find any formulas and schematics on how to build one. i have a schematic for a 2 ghz L.O but it doesn't have any formulas to figure out the components values. so my question is for you experts is do you guys or gals have any schematics, formulas or anything of that nature you could either post or e-mail to me? any light on this subject would be greatly appreciated.

thanx alot,
mlyon@rahul.net

--

Mike Lyon <mlyon@rahul.net>

Date: Sun, 19 Jun 1994 15:15:00 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!news.cs.indiana.edu!nstn.ns.ca!
newsflash.concordia.ca!vax2.concordia.ca!hirschj@network.ucsd.edu
Subject: Scanner docs needed
To: ham-homebrew@ucsd.edu

I recently acquired an old Regency crystal controlled 10-channel scanner at a ham fest. The only other ID markings are stamped on the case (#204-c26951). has anyone out there heard of this/have docs for this? The unit has 8 of the channels with crystals and 2 without. Each crystal socket has 3 pin inputs...it does not seem to make a difference whether I insert the crystal into pin inserts 1 and 2 or 2 and 3. There are also 3 antenna inputs; 2 that look like car radio plugs and 1 that looks like twin-lead screw terminals. Again it does not seem to make a difference which one I use. Finally there are two holes in the top of the case which look like openings for antenna whips; one is 1/4 inch in diameter and the other is half that. The unit works so I want to play with it (the price was \$4 so I couldn't resist). Any help or advice would be much appreciated.
Thanks,
Jack

Date: Sun, 19 Jun 1994 03:44:17 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!uhog.mit.edu!
news.kei.com!world!jgarrett@network.ucsd.edu
Subject: Source for PC board material
To: ham-homebrew@ucsd.edu

In article <CrJv8K.1w1@SSD.intel.com>, Roger Traylor wrote:
" Can someone advise me as to a cheap source for one and/or two sided
" PC board material.

Try your local scrap yard. They buy/sell scrap metal, but usually
can't use pc board because its not all copper, so they dump it.
jg

End of Ham-Homebrew Digest V94 #168
